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(71) Applicant and

(72) Inventor: TREMBLAY, Raynald [CA/CA]; 5658  
Chemin St-André, Jonquière, Québec G7X 7V4 (CA).

(74) Agent: ROBIC; Leger Robic Richard, CDP Capital Cen-  
ter, 1001, Victoria Square, Bloc E - 8th Floor, Montréal,  
Quebec H2Z 2B7 (CA).

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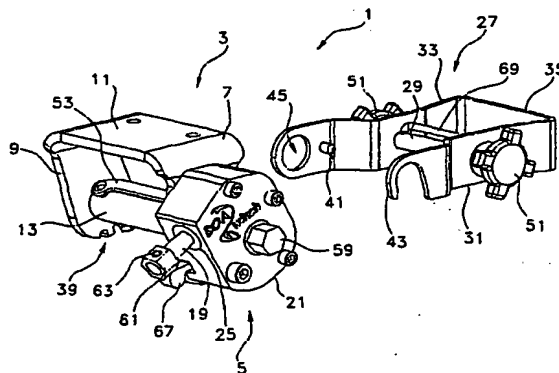
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(54) Title: WINCH, VEHICLE INCLUDING THE SAME AND METHOD OF OPERATING ASSOCIATED THERETO



(57) Abstract: A winch (1), a vehicle including the same and a method of operating associated thereto. The winch (1) is used with a strap (15) for fastening a load onto a transportation vehicle, and comprises a tightening assembly (3) and a gear assembly (5). The tightening assembly (3) comprises a support structure having first and second support flanges (7, 9) and a cross member (11) extending between the flanges (7, 9). The cross member (11) is devised for mounting onto a corresponding side track of the vehicle. The tightening assembly (3) also comprises a tightening reel (13) for receiving a portion of the strap (15) to be tightened about said reel (13), the tightening reel (13) being pivotally mounted onto the first and second support flanges (7, 9). The gear assembly (5) is operatively connected to the tightening assembly (3), and comprises a gear (17), a worm (19), and a casing (21). The gear (17) is securely mounted about the tightening reel (13) so as to rotate with said reel (13). The worm (19) is positioned adjacent to the gear (17) and operable between a first configuration where the worm (17) is away from the gear (19), and a second configuration where the worm (17) is threadedly engaged with the gear (19) so that a rotation of the worm (17) drives the tightening reel (13) via the gear (17), along opposite directions of rotation, for either fastening or unfastening the strap (15) onto the tightening reel (13). Excess portion of the strap 15 may be wound about a winding assembly (27) which is removably mountable onto the tightening assembly (3).

WO 2004/067318 A1